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A Survey of Current Labor Problems Involving Scheduled Air Line Flight Crews

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A SURVEY OF CURRENT LABOR PROBLEMS INVOLVING SCHEDULED AIR LINE FLIGHT CREWS

by

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LIFE

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CHAPTER I

INTRODUCTION—THE CREW COMPLEMENT ISSUE

The introduction of newer and faster airliners has always been preceded by difficult labor negotiations trying to set terms to cover their operation. It is often quite difficult to see beforehand what changes the new airplanes will bring with them. This problem is compounded by the addition, in the near future, of an entirely new type of aircraft, the turbine powered airplanes. Historical experience with airline labor problems shows that the more comprehensive and revolutionary the equipment change is, the more difficult and complex the labor problem will be. The jet will bring the greatest revolution in airline operations since the inception of the scheduled airlines themselves.

In the case of turbine powered, jet airplanes, the future is particularly cloudy. The economic factors underlying jet operation are, in great degree, still unknown. Many more variables exist in jet operation than are present today in piston powered airplanes. To cite merely a few:

1. Jets will use a form of kerosene, and cheaper fuel than the high octane gasoline presently used. However, fuel consumption will be increased by over two and one-half times.

2. The speed range of the various types of jet airplanes on order by the various United States airlines will range between 575 miles an hour to over 635 miles an hour. The fastest commercial airliner in operation today is the Douglas DC-7, with a cruising speed of 365 miles an hour.

3. The number of passengers that a Douglas DC-8 can carry will be about 134 in a combination of first class and coach. The DC-7 today carries either 58 passengers first class or 86 passengers in all coach configuration.

4. The purchase price of a Douglas DC-8 turbojet is $5,000,000. The average cost of United Air Lines' fifty-six Douglas DC-7 airplanes is $1,906,000.[1]

5. A Douglas DC-7 today is able to produce some 200,000 seat miles daily. A single Douglas DC-8, due to its greater capacity and vastly superior speed, will be able to produce almost 700,000 seat miles each day, or over three times as many as the DC-7.

Thus, if the percentage of occupied seats (load factor) remains the same as at present, it can be seen that the increases in revenue to the airlines is likely to be very large. On the other hand, expenses will of necessity be much greater than at present, due to vastly increased depreciation charges, fuel expenses, maintenance of aircraft and ground handling support for the airplanes. The increase in passengers boarded on the much larger jet aircraft will bring greater expenses in the number of personnel necessary to handle them and their baggage. With this large number of variable factors, the gap between what airline management thinks it can afford in the way of wage increases, and what labor's idea of the least it can ask for is wide, to say the least. The significance of the problem is best illuminated by the fact

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[1] United Air Lines Annual Report, 1957, page 9.

that five Presidential Fact-Finding Boards have been appointed to help work out airline labor problems. This becomes doubly significant when viewed against previous airline-labor backgrounds. Clarence Sayen, president of Air Line Pilots Association (AFL-CIO), made the following statement about his union's relationship with one of the large airlines "in eighteen years of contractual relationship between my association and Eastern Air Lines, there has never been a case even gone to mediation. We have been able to work the problems out across the table without government assistance or assistance of any kind."[2] This statement was made at the first meeting of the second of five Presidential Boards appointed to assist in working out a pilot contract. Eastern Air Lines has long been noted in the industry for its amicable pilot-company relations. Very shortly after this, a third board was appointed to help Eastern work out an agreement with its Flight Engineers. These disputes, although in actuality separate cases, were combined and public hearings held from February through June, 1958. The issues were, and are, so very complex that the board required two full thirty-day extensions plus another shorter extension to work out recommendations and an intelligible report.

The key dispute in today's airline labor problems is a jurisdictional dispute between Flight Engineers International Association (AFL-CIO) and Air Line Pilots Association (AFL-CIO). Again using Eastern Air Lines as an example, the Flight Engineers Association (AFL-CIO) announced it would strike

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[2]Clarence N. Sayen, Opening Statement Before Emergency Board Appointed By the President of the United States to Investigate and Report on A Dispute. Between Eastern Air Lines and Air Lines Pilots Association (AFL-CIO) - New York City, April 3, 1958, Page 1.

unless the company agreed to a contract provision requiring mechanic-trained flight engineers aboard future Eastern Air Line jet airplanes. At the same time, the pilots were demanding a similar provision in their contract guaranteeing that the flight engineer would be pilot trained.

The major jet age development influencing labor union policy is the probability that the airlines of the United States will be able to handle more passengers than ever before with fewer airplanes, and thus, fewer crews than at present. For example, American Airlines, second largest commercial airline operation in the world, now operates 195 airplanes of various types. During the Fall of 1957, C. R. Smith, president of American, predicted that by 1961 the airplane fleet of American would be cut down to some 120 airplanes.[3] Similarly, United Air Lines, currently the world's largest airline, now operates a fleet of 199 airplanes, consisting of 144 first class airplanes (41 Douglas DC-7, 36 Douglas DC-6B, 14 Douglas DC-6, and 53 Convair 340), 48 air coach airplanes (15 Douglas DC-7, 5 Douglas DC-6B, and 28 Douglas DC-6), and 7 Douglas DC-6A cargo aircraft.[4] By 1961-62 the fleet of aircraft may well be reduced to 130 (40 Douglas DC-8 jets, 51 Boeing 720 jets, and 39 piston engined aircraft).

This is quite a cut and it understandably has flight crew unions worried, Pilots stand to lose most since by and large the larger jet equipment will be

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Between Eastern Air Lines and Air Lines Pilots Association (AFL-CIO) - New York City, April 3, 1958, Page 1.

[3]Aviation Daily (Washington), October 12, 1957, p. 218.

[4]United Air Lines Annual Report, 1957, page 9.

replacing smaller twin engine equipment, as Convair 340, Martin 202 and 404, or Douglas DC-3 aircraft.

It is expected that these smaller airplanes, which never carried a flight engineer, will be replaced on short haul segments by airplanes such as the DC-7 and DC-6B, which are now used on long range flights and which, because of their weight, will carry a third crew member, the flight engineer. The jets will take over the long range route segments and will carry a flight engineer. The net result will be, in the case of United Air Lines, a fleet of 130 airplanes, all carrying engineers, replacing a fleet of 199 airplanes, of which only 146 necessitated a three-man crew. The requirements for flight engineers, then, would be cut from a number sufficient to man 146 airplanes to those required to staff 130. The pilots, on the other hand, now man 199 airplanes; in just a few years, this number will be cut to only that necessary to man 130, or a drop of sixty-nine airplane/crews.

The policy instituted by the Air Line Pilots Association (AFL-CIO) is one of protection. Certainly, it cannot hope to keep all of its members flying as pilots or co-pilots. However, if a requirement existed that flight engineers be pilot trained rather than mechanically oriented, as at present, then much of the pilot surplus would be taken up in the engineer's position, at the expense of a large number of the present Flight Engineer Officers. Faced with this threat, then, the obvious position of the FEIA (AFL-CIO) was one of maintaining the "status quo".

In summation, current airline labor problems, while involving wages and working conditions which apply to existing piston-powered airplanes as well as

to the turboprop and turbine jet equipment, have as an overriding issue that relating to the flight crew complement. Both labor organizations insist on requiring higher qualifications for the Flight Engineer than those set forth by the Civil Aeronautics Board. The FEIA (AFL-CIO) requires that, in addition to the Flight Engineer's certificate, certain other requirements be imposed which can only be met by a highly qualified mechanic. The Air Line Pilots Association (AFL-CIO), on the other hand, has established as its policy that the third crew member, in addition to the present Flight Engineer's certificate, be a pilot qualified individual. This the Flight Engineers' union regards as an effort on the part of the pilots' group to remove the present mechanic type flight engineers from their jobs and replace them with pilot engineers. Contrary to all previous custom within the industry, little constructive attention has been paid to various pay and working condition disputes; each organization has put the various airlines on notice that its members will not operate the airline, or at least not the turbine powered aircraft which will soon be received, unless its position on crew complement is recognized.

THE INTEREST OF THE PUBLIC

It is necessary to bear in mind that in this survey we are dealing with a public utility with which both the governmentand the public are greatly concerned. Nor is the airline industry governed to the same degree as in ordinary labor disputes by the factors of business competition and economics.

It must be borne in mind constantly that the industry is entitled, by law, to be subsidized by the government if it is absolutely required to do so in order to maintain and develop the quality and type of air transportation necessary for the commercial growth of the United States, and the maintenance of an adequate national defense. The airline being subsidized must, however, demonstrate economical, efficient, capable, and honest management to be eligible for this subsidation. It should be noted in this regard, however, that of the twelve domestic airlines whose operations are of a trunk character, only one receives any subsidation at all from the government. This is Continental Air Lines, which receives subsidy payments for some of its very short haul routes which are of a local service character. The larger airlines—United, Trans World, Eastern, and American—have received no subsidy payments for some twenty years.[5] The largest carrier of Air Mail, United Air Lines,[6] receives less than 4 per cent of its total revenue from Air Mail;[7] receiving thirty-two cents for carrying a ton of mail one mile. The deep interest of the public in the airline industry grows out of the possibility that the Federal Government may be called upon, by law, to extend financial assistance to any air transportation company, in the form of greater mail payments; a larger rate for carrying a ton of mail a mile. It is apparent that the public is also concerned over problems involving safety. The passage of a Federal Aviation

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[5] U. S. Department of Commerce, Civil Aeronautics Board, Financial Statements: 1957 (and previous), Washington, 1958).

[6] Ibid.

[7] United Air Lines Annual Report, 1957, page 3

Act by the last Congress demonstrates the concern of the Federal Government over the growing hazards of air traffic, culminated by the series of collisions in the air and the large number of near collisions which have and are taking place. It is readily apparent, then, that this is not merely a jurisdictional dispute between two unions, or simply between a labor union and an employer. The interest of the public must be paramount and this must play a large part in the settlement of the dispute. We must always keep this in mind in order to place the problem in its proper perspective.

THE CARRIERS RESPONSIBILITY

An air transportation company is required by law to conduct a safe and efficient operation.[8] This obligation is not merely moral, but is spelled out legally in the Civil Aeronautics Act of 1938. It has the primary responsibility for the airworthiness of its aircraft and for the safety of its operations. The Civil Aeronautics Administration originally certifies that a particular type of production aircraft may be used in commercial transportation in the United States; it does not have the responsibility, however, of passing on the continuing airworthiness of each airplane in a carrier's fleet. Thus, direct responsibility for the safety of each airplane lies directly with the air carrier. This is in addition to its legal obligation to any passengers

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[8]Civil Aeronautics Act of 1938, as amended, (Washington, 1938). Sections 404(a), 406(b), and 601(b).

who may become injured and its overall moral obligation to provide a safe and efficient method of air transportation. With this object in view, Civil Air Regulations provide minimum qualifications for crew members. One of these, dating back to 1948, provides that a third crew member be carried, in addition to pilot and co-pilot, on all aircraft with a weight of 80,000 pounds or more.[9] In the words of the Civil Aeronautics Board:

> "Despite the automatic devices which are available and installed in such aircraft, they have so many items calling for the pilots' attention and are so complex in operation that the pilots' ability to accomplish all duties imposed on them may at times be exceeded if provision were not made for a flight engineer. The flight engineer will contribute substantially to reduction of pilot fatigue and resulting accident provoking sequences. In particular, the duties which, if required to be performed when the aircraft is being flown on instruments, when there are difficult navigational problems, when radio communications are erratic, or when the pilots are attempting to follow complicated traffic control procedures, and accomplish instrument approaches would be exceptionally onerous."[10]

This establishment of the position of Flight Engineer, by the Civil Aeronautics Board along with its minimum physical and license requirements, is recognized by the Civil Aeronautics Board and all parts of the aviation industry as being merely minimum requirements which carriers, of their own choice, or through discussion and negotiation with union employees, may exceed at will. It is this which both Flight Engineers International Association (AFL-CIO) and the Air Line Pilots Association (AFL-CIO) are doing; asking the carriers to exceed the minimum requirements by a provision which

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[9]Report to the President by the Emergency Board, Appointed by Executive Order 10749 Dated January 21, 1958, pursuant to Section 10 of the Railway Labor Act, As Amended (Washington, July 21, 1958), p. 4.

[10]Ibid, p. 12.

for all practical purposes, is mutually exclusive of the desires of the other party. It would seem then that the settlement of this dispute must be reached with a view towards the legal responsibility of the airlines involved, that is, to provide safe transportation. Between the two alternative courses demanded by the contending unions, the carrier has the right, and the responsibility, to make its own choice, but its choice should be consistent to the greatest possible extent with its moral and legal obligation of providing safe transportation.

FUNCTIONAL RELATIONSHIP OF FLIGHT ENGINEERS AND PILOTS

When the third crew member was first placed aboard aircraft, it was not because the inflight operation of the aircraft required it. Maintenance facilities were scarce along the routes of many airlines. Carrying a mechanic made it possible for the individual to direct local maintenance of the aircraft and to certify it as being airworthy. The original title of this person was flight mechanic. Throughout the middle thirties and up to the middle forties, when the term "Flight Engineer" originated, this situation prevailed. After the war, of course, four engine aircraft of larger and more complicated design were introduced. In 1948, action was instituted which obtained a Civil Air Regulation requiring a third crew member on aircraft in excess of 30,000 pounds empty weight. This regulation was supported by the Air Line Pilots Association, but not by airline managements in general. There is no

concrete proof for the allegation that the pilots' union was trying to create additional jobs during a period in some ways similar to the present. The medium range Douglas DC-6 was being produced, to replace the shorter range Douglas DC-4. As at present, the replacement with new equipment would have caused less jobs. The facts are that at this time demand for air transportation exceed available equipment, the DC-4's were merely relegated to somewhat shorter flights instead of replaced. This year, however, available equipment is more than adequate to carry passenger traffic, even allowing constant traffic growth over the near future. The new jets cannot help but create a surplus. During 1958, the best available estimate, that of the Civil Aeronautics Board, is that some sixty-two percent of available seat miles are filled, or, conversely, thirty-eight per cent are empty. In 1947, the load factor (or per cent of seat miles occupied) was seventy-three per cent or only twenty-seven per cent empty.

This regulation, establishing the requirement of a third crew member, permitted the flight mechanic or flight engineer to qualify and serve in this position, or a qualified pilot could be used at the discretion of the company. Some of the airlines choose pilot personnel, others mechanics. The functional relationship of the Flight Engineer to the pilots is one of assistance. He has duties, not responsibilities. He assists the pilot, performing these duties under the direction, supervision, and command of the pilot who has the responsibility for the aircraft and the flight. The Civil Air Regulations assign the pilot his complete responsibility in these words: "The pilot in

command shall during the flight be in command of the airplane and crew and shall be responsible for the safety of the passengers, crew members, cargo and airplane." The Civil Aeronautics Board interprets this as: "Conferring on the pilot in command with respect to matters concerning the operation of the airplane, full control and authority without limitations over all other crew members and their duties during flight time." The role of the flight engineer as an assistant to the pilot is thus an undeniable and basic fact arising out of the history of his job specifications.

CHAPTER II

THE ECONOMIC ISSUES

Experience on Piston-Powered Aircraft

Disregarding claims made by both competing unions, various airline managements are of the opinion that there is little difference in terms of safety between pilot-qualified and mechanic-qualified flight engineers. Four airlines, Panagra, Capital, Delta, and Braniff consider that they have had satisfactory experiences and excellent safety records with pilot-qualified flight engineers. They show no inclination to change their policy. On the other hand, four airlines considerably larger than these have flown their piston engine equipment with mechanic qualified third crew members. These carriers are Pan-American World Airways, American Airlines, Trans-World Airlines, and Eastern Airlines. Pan-American and Trans-World are large international carriers, with TWA also being involved in a widespread domestic operation. This international character originally led to employment of flying mechanics on these lines due to sometimes inadequate maintenance facilities outside the continental United States. American and Eastern, however, are almost totally domestic carriers and always have had adequate facilities for servicing their aircraft. All four carriers have had results in terms of safety and efficiency in all respects equal to or surpassing those of the pilot-engineer airlines. In fact, American,

Pan American, and Trans-World have recently concluded agreements with Flight Engineers Association International which contracts for a mechanic engineer well into the jet operations era for these carriers; a five year contract for American and a three year contract for Pan-American.

It is very important to note, however, that two airlines, United and Continental, which formerly used mechanic engineers are in the process of switching over to pilot-engineers. In the case of United Air Lines, over 90 per cent of the flight engineers today are pilot qualified.[1] Further note should be made of an Eastern Air Lines finding through a study of its 1957 operations that its twin engine airplanes, Martin 404 aircraft, operated by only two pilots without the assistance of a flight engineer appeared to have had better mechanical functioning than did its larger equipment which nearly always required a flight engineer. This is reflected in a comparison of flight hours per engine failure, engine hours per unscheduled removal, and overall costs per flying hour. Even more weight is given to this comparison when it is observed that, by the very nature of the short range routes operated by the Martin 404 airplane, more frequent take-offs were required, with its attendent strain upon the aircraft.[2] Analysis of this comparison, however, leads one to the conclusion that at the very most, this argument merely casts some doubt upon the theory that there are functions which a mechanic-engineer can perform and which cannot be obtained with a pilot-engineer. There are variables in the type of

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[1]United Air Lines, Third Quarter Report to Stockholders, Chicago, October 15, 1957.

[2]Report to the President by Emergency Board Number 120. Washington, D.C., July, 21, 1958, p. 28.

operation (short-range and longer-range flights) which affect the engines, such as longer periods of climb at full power to which larger airplanes are subjected.

Disregarding at this point the possibility of human relations problems within the airplane cockpit as a result of the friction between the two unions, it appears that the requirements of safety are equally well met by either the pilot-engineer or the mechanic-engineer. One qualification, however, is necessary. In the case of overseas or extra-continental United States flights, a mechanic-engineer may be preferable due to lack of maintenance and service facilities on the particular route being flown.

Impact of Turbine-Powered Aircraft

As discussed in a small degree in Chapter I, we are about to enter into a period of great change in air transportation. The following table indicates the type and number of jet aircraft on order by United States Airlines. It should be kept in mind that the least expensive jet offered for sale today costs $3,200,000 each. The upper limit varies according to the optional equipment desired by each airline; the best estimates place this upper range at somewhere about $5,500,000. The latest piston engine airplanes, the Douglas DC-7, delivered in 1958 complete with radar and custom interiors, cost about $2,500,000 each.

TABLE I

SUMMARY OF JET EQUIPMENT ON ORDER, SEPTEMBER 1, 1958

	DC-8	Boeing 707	Boeing 720	Convair 880	Convair 600	Lockheed Electra
American	—	25	25	—	25	30
Braniff	—	5	—	—	—	9
Capital	—	—	—	9	—	—
Continental	—	4	—	—	—	—
Delta	8	—	—	10	—	—
Eastern	20	—	—	—	—	40
National	6	—	—	—	—	23
Northwest	5	—	—	—	—	10
Pan American	17	23	—	—	—	—
Panagra	4	—	—	—	—	—
Trans World	—	33	—	30	—	—
United	40	—	11	—	—	—
Western	—	—	—	—	—	9
Total	100	90	36	49	25	121

Source: United Air Lines Company Records

The purchase price of all these airplanes amounts to $1,565,000,000. From this point of view alone, and disregarding all human relations issues, the air carriers have a large stake in the future and their desire for stable labor conditions, without which profitable operation of this huge fleet is impossible, is well justified.

Virtually all of this new jet equipment will be used on the airlines' longer routes, and its piston engine airplanes gradually relegated to the shorter runs. This is the reason that the crew complement issue has become critical. If there must be a change from the widespread policy of mechanic-engineers to one of pilot—engineers, the time to do so is obviously now.

Do the changes in the type of aircraft operation present problems sufficiently different from those encountered in piston engined operation to merit the change advocated by the pilots or are the changes proposed by FEIA (AFL-CIO) in favor of more stringent mechanical qualifications necessary? This is the issue.

At this point it becomes necessary to distinguish between the two types of turbine powered airplanes. One is the turbine powered propeller driven airplane such as the present day Vickers Viscount or the coming Lockheed Electra. Some airlines call these airplanes "Propjets", in order to take advantage of the promotional aspects of the word "jet". This "propjet" is a misnomer; the correct designator is "turboprop". The airplane is powered by a turbine engine, but the turbine turns a propeller which drives the plane. The second type is the real culprit in the case; it is a turbine powered jet airplane which is driven by the compression of gasses which creates a thrust.

this thrust, identical in principal and in effect to air escaping from a rubber balloon, drives the aircraft forward. It is called a "turbojet".

Both of these new type of aircraft will be bigger, will fly higher and faster, and will have a radically different kind of power plant. It is modern equipment, recently designed and engineered and will have improved systems and many automatic devices not now in evidence on piston-powered airplanes. It is obvious from a study of both the turboprop and the turbojet that the former will entail a lesser change in method of operation than the turbojets, or "pure" jets. The turboprop will fly between 22,000 and 25,000 feet compared to 18,000 - 22,000 for the Douglas DC-7 and Lockheed 1649A Super Constellation. Its speed will be four hundred miles an hour compared with 365 for the DC-7 and 340 for the Lockheed 1649A.[3] The turboprop will use propellers, as do present day piston airplanes. Although modern technology has produced a number of changes in the control panels in the cockpit and throughout the airplane, several years' experience with the Vickers Viscount British Turboprop has made available a large store of information about turboprop operation.

A much greater degree of change and uncertainty is inevitable with turbojet airplanes. No transport even approaching them have ever been used in commercial air transportation by any American air carrier. An example of the uncertainty is the serious mishaps encountered by British Overseas Airway Corporation in 1952. In this year the DeHavilland Company of Great Britain

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[3]Lockheed Aviation Corporation Aircraft Specifications, Burbank, California, June, 1957.

produced a new type of airplane, the "Comet I" turbojet. A fleet of twelve was purchased by the government-controlled British Overseas Airways Corporation (BOAC). The airplane was thoroughly tested by both the British Government and BOAC and found in all respects to be a superb airplane. It was put into scheduled operations between London and Japan with intermediate stops such as Rome, Cairo, and New Delhi. After some months of uneventful, routine flights, three Comets crashed in just a few weeks. All indications pointed toward mid-air explosions. The Comet I fleet was grounded for investigation and subsequently sold by BOAC to the Royal Air Force. The investigations proved that the constant pressurizations of the cabin at high altitudes had caused small structural weaknesses in the cabin to rupture. Rapid Decompression occurred when the pent up air in the cabin reached through the structural faults, and caused an explosion very much like that which occurs when an inflated balloon is pricked by a sharp pointed object. The structural fault was caused by metal fatigue. This had never happened before, and is a good example of the uncertainties of jet transportation. Six years of research, coupled with extensive jet operations at high altitudes by the Air Force, has eliminated the possibility of metal fatigue being a factor in future airline operations, however.

Turbojet transports will fly at altitudes of 25,000 to 40,000 feet, with the optimum combination of performance and economy being at about 35,000 feet. The speeds involved will be far in excess of 500 miles an hour, with 600 miles per hour currently being considered likely. At departure, it will weigh between 265,000 and 300,000 pounds, and will require just under two miles of

runway space to leave the ground. The heaviest plane today weighs 125,000 pounds fully loaded and requires about 7,000 feet for take-off.[4] The jet will consume its fuel, a form of kerosene, at the rate of six and one-half tons per hour at optimum cruising altitude; if forced to fly at an altitude lower than its indicated cruise level, the fuel consumption rate may be as high as ten tons per hour. A DC-7 today, fully loaded with passengers together with their baggage, will weigh just about the same amount as only the fuel carried in a DC-8. Once committed to a landing, it is virtually imperative that the jet proceed to do so. Because of its speed and fuel consumption problems, careful flight planning will be a necessity. Weather conditions that are not taken into consideration properly, or unexpected weather developments, will cause rapid replanning of the flight path which must be accurate. Many airports have a physical limit on runway length, and certain conditions of temperature and pressure will cause normally useable runways to become unsafe for jet aircraft. The introduction of this newer and faster equipment will also add further emphasis upon the already overburdened departments of government which control air traffic movements.

Pilots Wage Structure

Pilot wage structure is a very complicated arrangement. The following items are taken into consideration when computing wages.

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[4] United Air Lines Company Records.

1. Base pay. Starting salary approximates $2,200 a year, with increases of $200 per year to a maximum of $3,600 a year in an individual's eighth year, and thereafter.

2. Terrain. Certain routes, such as Chicago to Cleveland, are considered as flat terrain. Cleveland to New York would be considered, on the other hand, as mountainous terrain. Pilots receive extra pay, per hour, according to the speed of the equipment flown, the type of terrain, and the time of day the flight operates, according to Table II. The statistics noted are for Captains only. Co-pilots receive the same base pay but only 50 to 53 per cent of the extra hourly pay of a Captain. In addition, extra pay is granted pilots and co-pilots for over-water flying; pilots receiving $2.00 more and co-pilots $1.50 more per hour. Furthermore, they receive an additional sum of two cents per each one thousand pounds of certified gross weight for each hour so flown in such an aircraft.[5] Historically, FEIA (AFL-CIO) estimates that Flight Engineers receive about 40 per cent of the total wages of a Captain, computed on much the same basis.

The most recent pilot wage proposal is that of American Airlines. The airline originally attempted to replace the above outlined multi-element pay formula with what it calls "positive pay plan". The ALPA (AFL-CIO) will discuss nothing but a multi-element formula, so American has replaced its positive pay plan with the following:

A 10 per cent increase in all elements. This would mean that a ninth

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[5]Agreement between United Air Lines and The Air Line Pilots in the Service of United Air Lines, Inc., Chicago, 1957, page 6-9.

TABLE II

PILOTS INCENTIVE STRUCTURE

Speed	Flat Terrain Day Per Hour	Flat Terrain Night Per Hour	Composite Rate Day Per Hour	Composite Rate Night Per Hour	Mountainous Terrain Day Per Hour	Mountainous Terrain Night Per Hour
Under 125 m.p.h.	$4.00	$6.00	$4.75	$7.25	$5.00	$8.00
125 UTBNI* 140 m.p.h.	4.20	6.30	5.00	7.50	5.20	8.30
140 UTBNI 155 m.p.h.	4.40	6.60	5.25	7.75	4.40	8.60
155 UTBNI 175 m.p.h.	4.60	6.90	5.50	8.00	5.60	8.90
175 UTBNI 200 m.p.h.	4.80	7.20	5.75	8.25	5.80	9.20
200 m.p.h. or more	5.00	7.50	—	—	6.00	9.50
200 UTBNI 225 m.p.h.	—	—	6.00	8.50	—	—
225 UTBNI 250 m.p.h.	—	—	6.25	8.75	—	—
250 UTBNI 275 m.p.h.	—	—	6.50	9.00	—	—
275 UTBNI 300 m.p.h.	—	—	6.75	9.25	—	—
300 UTBNI 325 m.p.h.	—	—	7.00	9.50	—	—
325 UTBNI 350 m.p.h.	—	—	7.25	9.75	—	—
350 UTBNI 375 m.p.h.	—	—	7.50	10.00	—	—
375 UTBNI 400 m.p.h.	—	—	7.75	10.25	—	—

*UTBNI signifies "Up to but not including".

year officer, flying the maximum eighty-five hours a month, assumedly half day and half night as is usually quoted, would earn annually:

TABLE III

AMERICAN AIRLINES WAGE PROPOSAL

	Captain	Co-Pilot
On a Convair 240 piston airplane	$17,424	$10,927
On a Douglas DC-6 piston airplane	19,560	12,059
On a Douglas DC-7 piston airplane	21,792	13,352
On a Lockheed Electra turboprop	22,400	13,564
On a Boeing 707 jet	26,939	15,970[6]

The Air Line Pilots Association (AFL-CIO) is demanding a third pilot in the cockpit of each jet aircraft. This will be an expensive proposition for the airlines inasmuch as the replacement of a mechanic-engineer by a pilot-engineer will cost the companies, some $5,000 per upgraded engineer. (According to information received from FEIA (AFL-CIO), the average senior flight engineer receives about $10,000 per year.) If the airline decides its operations require a mechanic-engineer, and further if it is forced to accept a third pilot (and thus a four man crew), it could cost them almost $16,000 per year. One large company estimates that upgrading the engineers to pilots

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[6] Aviation Daily, Washington, June 11, 1958, p. 301.

responsibility would cost them $3,300,000 a year with no increase in safety to the public. The second suggestion is estimated by the same airline as adding $7,250,000 to annual expenses, again without proportionate increase in safety.[7]

TABLE IV

A COMPARISON OF AIR LINE PILOT WAGE DEMANDS
WITH PRESENT CONTRACT WAGES
(Per Month)

Demands		International Flying	Domestic Plus International	ALPA Demands
Top Seniority)	70 hrs.	$2,130	$1,876	$3,015
Captains)	85 hrs.	2,572	2,273	3,758
Present				
Top Seniority)	70 hrs.	1,285	1,153	2,050
Co-Pilots)	85 hrs.	1,515	1,360	2,555

Pan American World Airways, the recipient of this Air Line Pilot (AFL-CIO) demand, estimates the increase is 82.4 per cent over present Captain rates and 89 per cent over present co-pilot rates. Pan American has offered a 15 per cent increase in wages. It is apparent that the demands of the Air Line Pilots Association (AFL-CIO) would permit a top seniority Captain to earn over $45,000 per year.[8] As noted previously, jets will be able, fully loaded, to

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[7] Ibid., September 25, 1958, p. 209.

[8] Ibid., September 15, 1958, p. 104.

bring in almost four times as much revenue as today's airplanes. Charts V and VI attached on separate pages indicate the increased productivity expected from these new airplanes.

Table V

CAPACITY OF WORLD'S AIRLINES

1954 - 1961

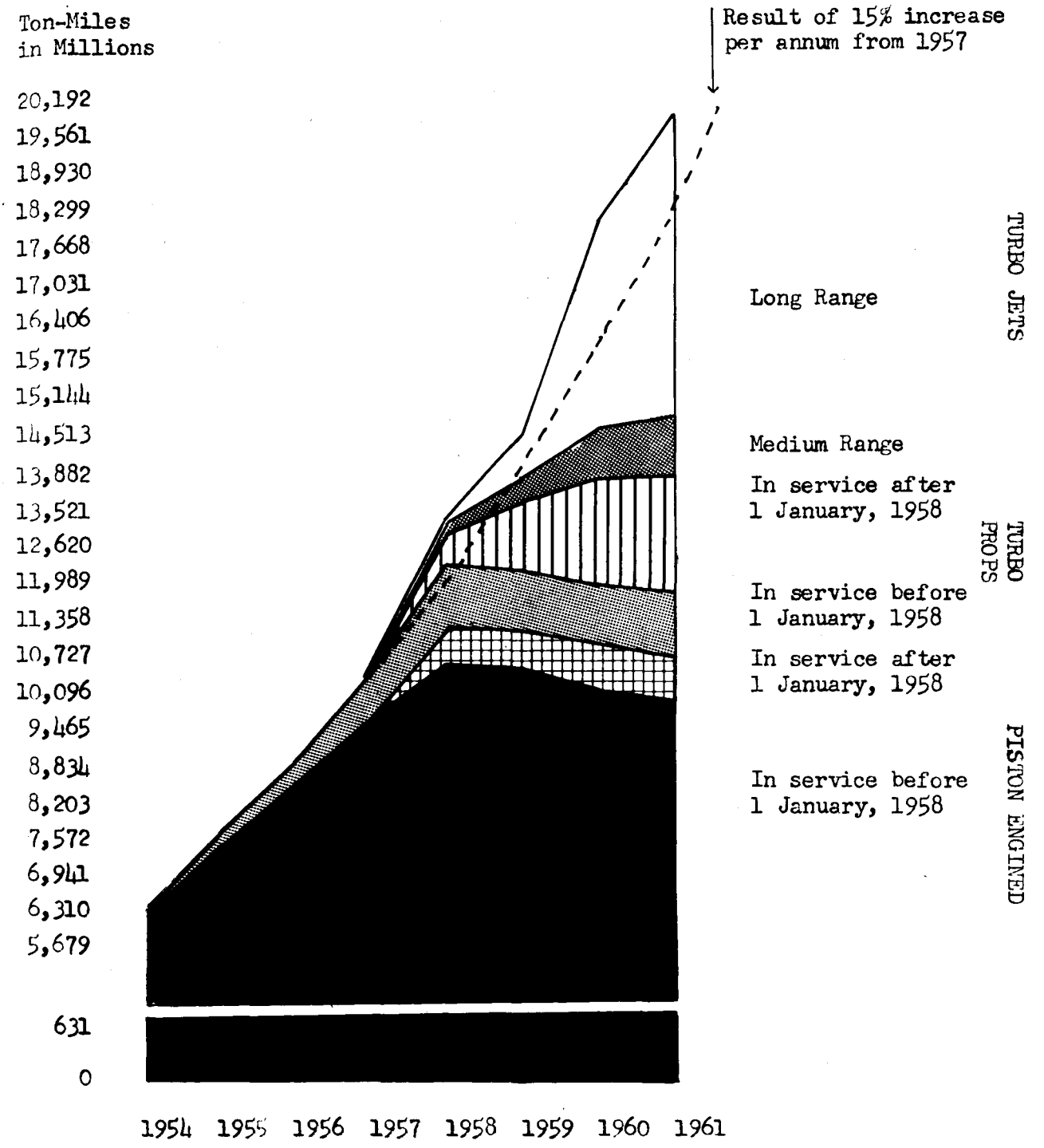
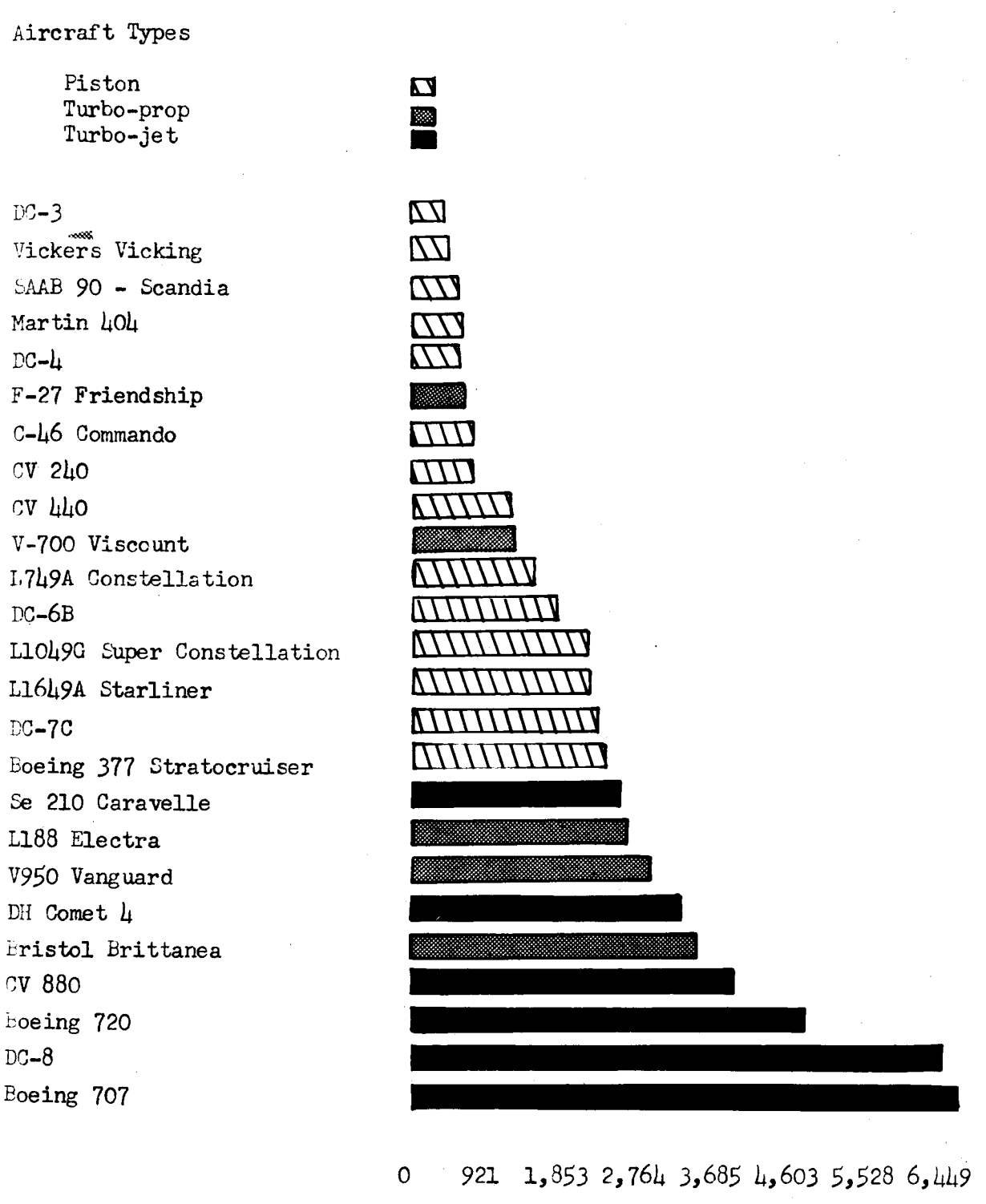


Table VI
Increase in Transport Productivity,
Expressed in Available Ton-Miles per Aircraft Hour



CHAPTER III

POSITIONS OF THE PARTIES

Air Lines Pilots Association (AFL-CIO)

Perhaps the most effective method of presenting the position of the pilots' union is to quote excerpts from its policy verbatim.

> Resolved that it shall be the policy of the Air Line Pilots Association that all members of the operating crew shall be pilot qualified, and
>
> Be it further resolved that the Board of Directors at the 14th Convention adopt as mandatory ALPA policy, that no Turbo-Prop or Jet Turbine Powered Aircraft will be operated unless and until it is manned at all flight stations, by a qualified pilot in the employ of the company as a pilot and
>
> Be it further resolved that it shall not be inconsistent with the implementation of this policy for the Association to provide job protection for currently employed non-pilot operating crew members, and
>
> Be it further resolved that the third crew member requirement, on present and future aircraft be continued, and
>
> Be it further resolved that crew members shall be known as Captain, First Officer, Second Officer, Third Officer, Fourth Officer, etc., and under no circumstance will such pilots be referred to as Flight Engineer, Navigator, Radio Operator, etc., and every effort shall be made to encourage standard usage of these recommended titles, and
>
> Be it further resolved that ALPA will resist the removal of any crew member from the operating crew, unless the pilots involved concur with such removal. The pilots involved will not give their approval without first considering two things:
>
> 1. Can the trip be safely operated after the removal of the crew member?
> 2. Are the pilots willing to accept the additional workload?[1]

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[1]Air Line Pilots Association, Compilation of Actions, 14th Convention Miami, 1956.

The Air Line Pilots Association (AFL-CIO) has taken, or is taking, strike votes against Pan American World Airways, Eastern Air Lines, and American Airlines. These votes are the result of two things:

1. Studies that ALPA (AFL-CIO) undertook on how the faster airplanes would affect their working conditions; and

2. The refusals of these carriers to accede to ALPA (AFL-CIO) demands for a guarantee that all flight crew positions be filled with pilots.

As a result of extensive studies made of jet equipment, the pilots came to the conclusion that the work of the third man on the jet would be a far different one from what it is today on piston powered aircraft. Today's flight engineer is concerned mainly with propellers, fuel mixture controls, cowl flaps, engine superchargers and similar mechanical devices. He regulates the engine cowl flaps on take-off, and regulates the fuel mixture for maximum efficiency. He is responsible for maintaining proper cowl settings for correct engine cooling.

The pilots contend that the jets will have none of these mechanical functions. No propellers exist, no mixture controls, no cowl flaps. Pressurization of the cabin will be virtually automatic. The function of the present engineer will be gone. Most of the aircraft systems will be electronic rather than mechanical. If any system breaks down in flight, no repairs will be possible and the only recourse will be to land for repairs. The only remaining major task for the engineer will be fuel management. ALPA (AFL-CIO) feels that this can probably be done more efficiently by electronic computing devices.

> "All this means, simply, is that there will be little reason why the third crew member on tomorrow's jets needs to be a qualified mechanic. Indeed it would be a social waste to put a well trained mechanic into a spot where his skills cannot be utilized."[2]

The Air Line Pilots Association (AFL-CIO) points out that the largest operator of jet aircraft in the world, the Air Force, even in its largest jets, carries no flight engineer. The pilots have chosen to ignore the fact that the Air Force does not carry a third pilot either.

The duties of the pilots will be far from simplified in jet operations, however, The number of planes in the air has been increasing greatly. Such airports as Chicago's Midway, Washington's National, and New York's La Guardia have reached their operations limit. Any planned increases in airline schedules are forced to utilize alternate airports, as O'Hare in Chicago, Idlewild or Newark in the New York area. A new airport is presently being constructed in Washington. The merging of faster aircraft into the traffic flow at these and other fields will merely mean that present congestion will cover a larger area, and that pilots need to be more alert. As noted in Chapter II, the jets will consume six and one-half tons of fuel an hour. This is almost three times as many gallons per hour as today's aircraft. This means that pilots will have to plan his flight even more carefully than at present. He will have little time to "hold" at an airport for weather improvement. His decisions must be made faster, and more accurately, than today.

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[2]Statement by Karl M. Ruppenthal, former Executive Vice-President, Air Line Pilots Association. Reported in Aviation Daily, Washington, April 8, 1958, p. 26.

When two Piper Cubs three miles apart approach each other at sixty miles an hour, the pilots have a minute and one-half to take evasive action. If the Piper Cubs are replaced by two Boeing 707 jets flying at 600 miles an hour, the time allowed for pilot action is reduced to nine seconds. The pilots feel that two pilots must always be in the cockpit to watch out for traffic. Since circumstances often require one pilot to be absent from the cockpit, a third pilot must be available for the required "look-out". The pilots' union is silent on the possibility of this vital function being performed by electronic computers, which could also initiate necessary evasive action.

Another important factor is the possibility of explosive depressurization, similar to the British Comet incidents noted in Chapter II. If a window blows out of a plane flying at 20,000 feet, as could happen in today's equipment, it is not very difficult, nor time consuming to descend to 10,000 feet, where oxygen in the air is sufficient to support life. The story is quite different when the altitude involved is 45,000 feet, as is possible in jet operation. The pilot will have but a few seconds to don an oxygen mask and start an emergency descent. If one of the pilots is not fast enough, he may be asphixiated before his oxygen mask is in place. The pilots recommend a third pilot as an important safety factor in such cases.

The pilots admit that the medical factor is also important since many pilots in scheduled service have passed their sixtieth birthday. During 1957 two pilots died of heart attacks while piloting separate airplanes. Another quoted instance is a situation in which both pilot and co-pilot suffered a severe case of food poisoning from eating food served in flight. (The author's

pride in his own airline impels him to state that the carrier involved was not United Air Lines.) In the case of the heart attacks, there is nothing to indicate that more thorough physical examinations would have given advance warning. The Air Line Pilots Association (AFL-CIO) says the answer is to put a third pilot on board. Today's aircraft can generally be flown adequately by one pilot, with the second, or co-pilot, as a safety factor. The pilots feel that tomorrow's jets will probably need two pilots constantly. Therefore a third pilot is required for purposes of safety.

The pilots know that the airlines are caught in a squeeze play. The engineers threaten to strike unless the company guarantees them a job on the jets, while the pilots threaten to strike if it does. They also know that the airlines would like to have the issue resolved now. It will be easier for the carriers to stand a strike now while business is relatively slack than when the jets are actually here. Today's DC-7's have a book value of about $300,000 each. It is far less expensive to have them grounded than the jets with their $5,000,000 price tag.

This dilemma is worse on Pan American World Airways. That line signed a contract with Flight Engineers International Association calling for mechanic flight engineers for a period of five years. The new engineer scale is so high that pilots pay will have to be raised about 35 per cent in order to maintain historic differentials. As discussed in Chapter II, Pan American may still be forced to carry a third pilot because of ALPA (AFL-CIO) action. If this occurs, its cockpit costs will be about 25 per cent higher than that of Trans World Airlines and its European competitors.

In a positive way, the Air Line Pilots Association (AFL-CIO) has a plan, for displaced flight engineers. The plan actually is an adoption of the program instituted by United Air Lines when it switched to pilot-engineers in 1952.

1. All flight engineers who could qualify as pilots would be trained at company expense and allowed to fly in any spot to which their seniority entitled them.

2. Presently employed flight engineers would be guaranteed job security as flight engineers as long as the company operates piston engine equipment.

3. Some arrangements could be made for early retirement for those engineers desiring it.

4. If the jets come rapidly, presently employed flight engineers would be guaranteed good jobs in the maintenance shop, where they are badly needed.

5. At their option, engineers could accept severence pay.

Pan American Airways began scheduled jet service October 26, 1958, with a daily round trip New York to Paris to Rome, and added a second service November 14, 1958, New York to London round trip. Since no pilot contract has been signed, regular pilots will not fly the aircraft involved, the Boeing 707. The daily schedules are being flown by Pan American's twenty-two supervisory pilots. This arrangement obviously cannot continue long. The National Mediation Board is now trying to get the parties together on a temporary basis, at least until the present highly charged atmosphere clears.

The Air Line Pilots have accused Pan American, American, and TWA of negotiation "Sweetheart" contracts. In the case of American, a news release

says:

> "American Airlines management is evidently prepared to pay any price, including attempting to operate their turbine powered aircraft under a concept which has been declared unacceptable by the pilots of all other U. S. airlines, and by the pilots of practically all air lines of the free world. American Airlines has not only seized the opportunity to profit from their "sweetheart" deal with FEIA, but evidently hopes to profit by savings on an inadequate system of crew qualification and training which will not provide a fully qualified 'fail safe' crew on American's turbine powered aircraft."[4]

In summary, the Air Line Pilots (AFL-CIO) demand that every flight deck station on the turboprop and turbojet aircraft be manned by pilots; that all new pilots be required within twelve months to obtain a flight engineer's certificate (not an Aircraft and Engine License). They feel that jet operating conditions will call for the utmost in flight crew coordination. This will be impossible if all crew members are not pilot oriented, and particularly when there is job rivalry as at present. The presence of three crew members, all capable of flying the airplane, will serve as a means of relieving tension and will provide greater assurance of safety. The pilots emphasize that the flight engineer resulted from proceedings supported by pilot groups; and that the engineer was placed aboard the aircraft to relieve the pilots of certain details which were always previously handled by pilots. They contend that the effort of the flight engineers to extend the mechanic engineers job to turbine equipment is a challenge to the legal and traditional authority of the pilot in command. The pilots maintain that this would impair the level of safety necessary under the conditions which will be faced.

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[4]News Release from Air Line Pilots Association, Chicago, April 7, 1958.

Flight Engineers Association International

The flight engineers feel that the arguments advanced by ALPA (AFL-CIO) are not new. The jet and turboprop transports are simply a new excuse for their introduction at this time. They advance the theory that an historical approach is necessary to fully appreciate the problem.

In 1954, ALPA (AFL-CIO), Eastern Air Lines Council decided that the flight engineers presence as a separate craft diminished their paramount authority in the cockpit, and demanded that Eastern train all its pilots so that they might obtain a flight engineers certificate. Eastern refused and the pilots threatened to strike. To avoid an industry-wide problem, Eastern and thirteen other carriers represented by the Air Transport Association requested that the Civil Aeronautics Board change its rules so that only a commercial pilots license would satisfy the requirements for flight engineer. The government agency denied the request, stating that the mechanical complexity of aircraft types introduced since the original mechanic-engineers rule justifies to an even more marked degree than ever the necessity of providing within the flight crew, in addition to the pilots, an individual possessing more extensive experience and training in the mechanical operation of aircraft then that required of pilots. The decision was not opposed by the Civil Aeronautics Administration, which at that time was conducting studies of the regulatory problems of jet operation. The Board also stated that the presence of an engineer in no way diminished pilot authority.

FETA (AFL-CIO) contracts with carriers have always held that pilots can obtain a flight engineer's certificate if he demonstrated his flight engineer-

ing knowledge and proficiency in accordance with regulations. Airlines had the option of choosing whichever type of engineer they wanted. As a result, 90 per cent of the world's flight engineers do not seek or expect pilot classification, have a separate seniority list, and are represented by their own bargaining unit.

The FEIA (AFL-CIO) strongly attacks the ALPA (AFL-CIO) concept that safety demands a third pilot, especially since this only seems to be the case on aircraft requiring a flight engineer. No one talks about "fail safe" crews for the Vickers Viscount turboprop, the Fairchild F-27 turboprop, or any of the executive jet aircraft requiring just two pilots.

From the technical aspect, the engineers point out the experience of military and civil operators of jet aircraft indicates that the safety of a flight may well depend upon proper analysis of air conditioning or pressurization systems to prevent or provide warning against the failure of these systems which are absolutely imperative to life at 25,000 to 40,000 feet.

The use of alternating current is expected to increase the complexity of instrumentation by about 70 per cent. Fuel management for jets is vital, for mishandling of pumps or tank selectors can cause thousands of pounds of lateral imbalance in minutes, along with appreciable shifts in the center of gravity of the aircraft.

Where pilots wish to substitute electronics for an engineer, the flight engineers point out that development of new systems, such as the Kollsman Integrated Flight System, will ease the burden of the pilot but will create electronic complexities out of formerly simple devices as altimeters and air-

speed indicators.

The British Aviation Insurance Company, which insures now and will probably insure in the future all British aircraft plus the majority of aircraft flown by European carriers, wholeheartedly supports the retention of mechanic-engineers on aircraft. Since the company will have about a one billion dollar interest in airline safety, their opinion, supported by English technological studies, must bear considerable weight. Alan B. Hunter, principal surveyor of the company, says:

> "It is in the diagnosis field that a Flight Engineer would be invaluable. The amount of knowledge that a pilot today is called upon to assimilate precludes any hope that he could also be an expert in systems engineering diagnosis. A flight engineer can fill this gap."[5]

If, on a transcontinental Boeing 707 flight, the cruising speed was allowed to go beyond the optimum by 1 per cent, the fuel reserve for "holding" (waiting for landing clearance) would be reduced by 25 per cent and its range at 20,000 feet reduced by seventy-five miles. This is where the analytical abilities of a flight engineer, combined with careful monitoring of flight performance can be a positive safety factor.

Every turbine aircraft in operation today requiring a three-man crew, carries a mechanic engineer. The Boeing 707, flown by Pan American supervisory pilots, is manned by a regular flight engineer. British Overseas Airways Corporation carries a specialist flight engineer on its turboprop Bristol Brittania and its DeHavilland Comet IV. In accordance with this policy, the British

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[5] American Aviation, Washington, April 7, 1958. p. 27.

Overseas Boeing 707 and the advanced Vickers VC-10 jet will have an engineer's position built into them.

El Al Israel Airlines and Aeronaves de Mexico are carring technical specialist flight engineers on the turboprop Brittania transports.

The United States Government, when placing an order for three Boeing 707 transports for the use of the President and other top officials of the United States and visiting countries, specified that a mechanical specialist flight engineer's position was to be built into the aircraft.

Pan American World Airways has signed a five-year contract with FEIA (AFL-CIO) covering its flight engineers in the jet era, and listed its reasons for doing so as follows:

1. By pre-existing contract the professional engineers are entitled to perform the engineering function where it is performed by a separate individual in the cockpit.

2. The National Mediation Board holds that, under the Railway Labor Act, the FEIA (AFL-CIO) is the proper bargaining agent for flight engineer employees. The Board urged that Pan American include in any contract with the union the right of the engineers to serve on any Pan American planes, including jets, where engineers are required.

3. Jurisdiction by FEIA (AFL-CIO) over those performing Flight Engineer functions is recognized by the AFL-CIO Washington headquarters.

4. The contract makes it possible for the company to begin making plans for jet training and crew assignments.

5. The agreement assures continuation of the Company's strict safety

policy of using only highly trained and qualified engineers.

The Civil Aeronautics Board has refused to change the regulations governing flight engineers. In view of this, the pilots union is the only group in the industry claiming a safety hazard exists. Even though the pilots claim that the problem is technological, and a matter of safety, its representatives have told individual flight engineers that if they would join the Air Line Pilots Association (AFL-CIO), an arrangement could be worked out whereby non-pilot qualified engineers could be allowed to perform their duties in jets. This attitude on the part of Air Line Pilots Association (AFL-CIO) officials seriously impairs their claim that the problem is one of safety.

As noted in Chapter I, the FEIA (AFL-CIO) feels that the controversy stems from the concern of the pilots that pilot unemployment will result from the conversion to turbine equipment. United, American, Trans World, and Pan American have already furloughed a considerable number of co-pilots. In the case of Pan American, the most recent furlough of 223 pilots brings the total released by that company to well over 300.

As small non-flight engineered equipment is replaced by flight engineered jets and turboprops, many more pilots will be furloughed, while engineer lists will remain relatively stable. This very serious problem has caused ALPA (AFL-CIO) to demand a fourth crew member, a pilot, on airlines where it has virtually given up its fight to replace the engineer.

On one large airline, the pilots association has approached FEIA (AFL-CIO) with the demand that protection for furloughed pilots be provided by allowing them to take flight engineer jobs.

In summary, the flight engineers request that all occupants of the third seat in the cockpit be required to have airframe and engine (A and E) licenses in addition to the Flight Engineer's certificate stipulated by present Civil Aeronautics regulations. The union feels that both the National Mediation Board and the American Federation of Labor have recognized it as a separate craft from that of pilots. It maintains that the mechanical tasks performed by the engineer contribute to both safety and efficiency; that the kind of preventative maintenance possible with flight engineers possessing a thorough mechanical background cannot be provided by a pilot-engineer or a flight engineer who does not have the ability to obtain the Airframe and Engine license.

Position of Various Airlines

C. R. Smith, President of American Airlines, says:

> "The facts of the situation are that there is need for the service of a flight engineer, and there is no need for the services of a third pilot. There are two qualified pilots on each of the airline planes, and that number has been found to be sufficient by the CAB, by the airline experience, and by the judgment of airline management. In the case of American, we have a specific written obligation to respect and continue the services of the flight engineer."[6]

Trans World Airlines and its flight engineers have concluded an agreement which will extend to January 1, 1960, and provides for retention of the mechanical specialist engineer aboard TWA's jet airliners. Trans World feels its first obligation is to provide service to the public. It also feels that its

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[6] Aviation Daily, Washington, July 28, 1958, p. 192.

best course in fulfilling this obligation is to continue with mechanic engineers, as experience has dictated exceptional safety results with this type of operation.[7]

Eastern Air Lines, whose engineers have threatened to strike, has signed a contract with its pilots, but which did not guarantee the engineer's seat to the pilots union. Eastern has adopted a "hands-off" policy on the crew complement issue. It has told its employees that it stands ready to assist both ALPA (AFL-CIO) and FEIA (AFL-CIO) to resolve their differences over the crew complement issue but that it cannot go beyond the nation's laws to be of assistance.[8]

Western Air Lines, victim of a pilots' strike during the spring of 1958, and frequently beset with chaotic company-pilot relations, feels that the airlines should be removed from the jurisdiction of the Railway Labor Act. Western's President Terrell C. Drinkwater draws a parallel between the long and costly experience of the railroads with "featherbedding" and feels that the current trends in the pilot association's policy would lead to airline "featherbedding".[9] Western has a contract with its pilots until September, 1959, at which time it will receive its first turbine equipment.

Continental Air Lines is trying to switch to pilot engineers, but does have a contract with FEIA (AFL-CIO) calling for airframe and engine licenses

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[7] Ibid, Washington, July 31, 1958, p. 229.

[8] Ibid, Washington, October 21, 1958.

[9] Ibid, Washington, May 27, 1958.

for its engineers. It attempted recently to hire some furloughed United pilot engineers, but was restrained by court action from doing so as long as some of its own engineers with airframe and engine licenses were still on furlough.[10]

Pan American has signed a three-year agreement with its flight engineers and is currently negotiating with its pilots. The Air Line Pilot Association (AFL-CIO) has apparently given up hope of replacing engineers with pilot engineers on this carrier, so has demanded a fourth crew member, who would be a third pilot.

Manufacturing and Military Representatives

Contrast with these forecasts statements made by men thoroughly familiar with jet equipment, having flight tested Boeing 707 and Lockheed Electra equipment for over a year. Harold "Fish" Salmon, chief test pilot on the Lockheed Electra said "As I see it, the third pilot on the Electra would be going along for the ride, as a trainee. And he wouldn't get in much flying time at that. The Electra is easier to fly than any piston powered airplane in operation today. The low noise level and lack of vibration has reduced pilot fatigue to a minimum." A. M."Tex" Johnson, top test pilot of the Boeing 707 said "It will normally operate with a crew of three, pilot, co-pilot and flight-engineer." An Air Force Major General, concerned with crew safety who preferred anonymity said, "Iwould not want a third pilot in the jet transport cockpit."[11]

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[10] Ibid, Washington, May 21, 1958.

[11] Ibid, Washington, June 9, 1958, p. 284.

Air Transportation Association

The Air Transport Association, which represents the totality of scheduled air lines in the United States, is sharply critical of the Air Line Pilots Association (AFL-CIO), although not attacking its crew compliement policy. The group points out that the industry's annual payroll of $800,000,000 amounts to almost half the expense of running the airline. The highest paid group, pilots, constitute less than 10 per cent of the total payroll. In 1957, the average for captains flying domestically was $17,718, with an average of $22,288 for international flying. Moreover, where a pilot demands wages of $28,000 a year, the potential value to the pilot is about $37,550 when other advantages such as pension, are included. The liberal strike benefit plan, entitling a pilot to $650 per month, enables the union frequently to threaten strikes. The Air Transport Association says that the Air Line Pilots Association (AFL-CIO) employs the strike threat at least once during virtually every negotiation of a contract. The Airline group is highly critical of the Railway Labor Act jurisdiction over airline operations.[12]

AFL-CIO

The AFL-CIO has taken cognizance of the situation. In a letter dated February 11, 1958, a committee of AFL-CIO vice-presidents reported to President George Meany:

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[12] Ibid., Washington, September 26, 1958.

1. "The committee feels that the close relationship of the flight crew, which is now faced with the introduction of an entire new series of larger and faster aircraft, makes it imperative that the flight crew must belong only to one organization. The committee, after hearing the arguments of both the FEIA (AFL-CIO) and ALPA (AFL-CIO), can find no reason why the merger of these two organizations should not become a reality.

2. The committee recommends that the Air Line Pilots Association (AFL-CIO) be instructed to recognize the jurisdiction of the Flight Engineers and to refrain from attempting to enlist flight engineers into membership in the ALPA (AFL CIO)."

The pilot group is prepared to accept the recommendations of the AFL-CIO, but the flight engineers union has repeatedly rejected merger negotiations.[13]

And so the controversy continues today. It is reaching such intensity that it may ground the nation's airlines. The results of the conflict have been to divide ALPA (AFL-CIO), since a fairly large group of the more senior pilots strongly favor mechanic engineers; hurt the airlines, and distract the flight crews from the technical problems of jet turbine transports on which they must work together as a cohesive unit.

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[13]News Release from Hammond, Beamish, and Crinnell, Public Relations Organization for Flight Engineers Association International, New York, March 4, 1958.

CHAPTER IV

RECOMMENDATIONS OF GOVERNMENT BOARDS

Emergency Boards Number 120 and 121

On July 21, 1958, the two Emergency Boards appointed in January, 1958 to consider the labor disputes between Eastern Air Lines and its pilots and flight engineers reported to the President.

David L. Cole of Paterson, New Jersey, Chairman, Saul Wallen of Boston, and Dudley E. Whiting of Detroit were the members of both boards. The following is a short resume of their ninety-eight page report.

The pilots insist that on the jets the third man must have pilot qualifications in addition to the flight engineer certificate stipulated by government regulations, in order to assist the pilots in some of the many additional flying duties they will have in the 600-mile-an-hour airplanes which will fly at altitudes of 30,000 to 40,000 feet, where danger of accidental decompression is great. The Board sustained the pilots on the turbojets on the grounds of safety and efficiency, pointing to the great increase in hazard due to air traffic congestion which will come with the introduction of the new airplanes, the need for constant vigilance, and hence for relief from detailed navigation, communication, and paper work. It was also suggested that the third man, capable of flying the aircraft in an emergency, provides an important safety factor.

The flight engineers demand that higher mechanical qualifications be required rather than flying ability was rejected because of the decline in mechanical duties which can be performed in flight in these highly automatic airplanes and because the greater need is for assistance and relief for the pilot.

The Boards noted that the AFL-CIO has several times since 1955 been asked to intervene in these inter-union disputes and has each time urged the two unions to merge as the best solution. The pilots have agreed to move in this direction but the Flight Engineers have refused.

The Boards further suggested means of protecting the jobs of incumbent flight engineers by leaving the present job qualifications unchanged as to all piston and turboprop airplanes and by having Eastern Air Lines agree to offer pilot training to flight engineers who can qualify for pilot work. It also proposed that, during the period of transition from piston to turbine powered airplanes that flight engineers should take pilot training, but maintain their seniority on the flight engineers' list so that they may return to their former jobs if necessary.

These recommendations in the crew complement disputes are similar in some respects to the program now being implemented at United Air Lines where the mechanical flight engineers are being required to obtain pilot qualifications.

The Boards report, which has been approved by President Eisenhower, does not constitute a settlement of the strike threat against Eastern Air Lines. It is interpreted, however, as a victory for the pilots union. George Petty, President of FEIA (AFL-CIO), promptly rejected the report by stating "we will accept no findings on the crew complement issued by the Board." He branded the

report "incredible and foolish." Clarence N. Sayen, President of ALPA (AFL-CIO), was satisfied with the overall report, saying: "It now becomes the recommendation of the President of the United States, and, therefore carries great weight and must be carefully considered."

There is no doubt that the boards' decision is a sharp blow to the flight engineers union. The union has been strengthening its position for several years to meet the anticipated decline in cockpit jobs during the initial stages of jet transport operations. Its chances for ultimate survival now rest on its further negotiations with other airlines, since final decision on crew qualifications, over and above certain minimums established by government regulation, rest with each carrier involved.

The report said that "aflight engineer taking pilot training will presumably do so on his own time, although at company expense."[1] It added that if the engineer chooses to be trained as a pilot, his seniority on the engineer list should continue to accrue for sufficient time to assure him job protection.

Replies to Emergency Board Recommendations

FEIA (AFL-CIO), on July 25, rejected recommendations of the emergency board. The Eastern Air Lines local chairman said that the board's proposal was a "ridiculous compromise," adding: "We are right back where we started

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[1] Report to the President by Emergency Board #120, Washington, July 21, 1958, p. 41.

last January before the fact-finding board entered the picture."[2] The comments of the local FETA (AFL-CIO) Chairman, Jack Robertson, of Washington, D. C., are apparently well taken. Some Airline Employee Relation Departments feel that that Emergency Board's possible solutions to Eastern Air Lines' current labor difficulties easily may have proposed compromises so broad as to be ineffective. In effect, the Board did not rule on crew complements involving turbine powered aircraft. The Board proposed that turboprop airplanes be flown with mechanic personnel and turbojets with pilot trained engineers. This approach seems to have satisfied just about no one, although the pilots union has expressed some degree of approval. Eastern Air Lines itself, although later "accepting" the report, is known to be somewhat short of overjoyed at the prospect of additional training costs, estimated by Eastern to be in the neighborhood of $5,000,000.

Eastern Air Line Reply to Emergency Board

An Eastern Air Lines bulletin to all pilots and flight engineers stated that the company "has given the Board's report very careful consideration and has decided to accept the recommendations contained in it." The bulletin outlined its understanding that on all present aircraft requiring flight engineers and on the Lockheed Electra turboprop all present flight engineers will be used without additional qualifications, subject only to checking out on the aircraft. On DC-8's and any future turbojet aircraft requiring flight engineers, the

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[2] Avaiation Daily, Washington, July 25, 1958, p. 183.

flight engineer will be required to have "the basic qualifications of a pilot" in order better to assist the pilots in performance of their duties. The company further stated that it will offer present flight engineers who are in line for advancement to new aircraft the amount of training normally required to obtain a commercial license with an instrument rating, to be taken on the engineer's own time. The flight engineer will be familiarized with the jet aircraft, but will not be required to have the same familiarity and skill which are expected of the pilot and co-pilot.[3]

Eastern did not make any comment on the Board's proposal for a merger between ALPA and FEIA (both AFL-CIO), beyond noting that the recommendations offer possibilities for greater harmony in the cockpit, but that the company will not interfere with its employee's choice of bargaining representatives.

Company and union action following the company's bulletin are best followed in chronological order. As noted before, the Emergency Board's order was issued on July 21. Eastern accepted the Board's recommendations on August 17.

On August 19, FEIA (AFL-CIO) officials announced that Eastern's acceptance of the Board's recommendations will probably result in a flight engineer strike. They did not reveal strike plans but said, should one occur, in all likelihood it will be without advance notice. The hope that the airline could continue operating without flight engineers is a remote one. United Air Lines,

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[3]Ibid., August 22, 1958, p. 391.

in 1956, suffered no substantial breakdown in operations when flight engineers struck there. The pilots flew in the flight engineers' position. Everyone believes that Eastern's pilots would be very willing to do this also. However, the key to this situation is the ground mechanics, who are not likely to permit it. A short review of another Eastern dispute involving the mechanics will make this reasoning clear.

Several years ago, during a ground mechanic [members of IAM (AFL-CIO)] strike at Eastern, the pilots were asked for support. This would have meant honoring mechanics' picket lines and refusing to fly the airplanes. The pilots local chairman informed the mechanics that ALPA (AFL-CIO) policy dictated that pilots not perform the work of other crafts, but it was also the policy not to be bound by the picket lines of other unions. The only concession that ALPA (AFL-CIO) would make is that it would not fly the aircraft unless they (the aircraft) were properly maintained. It will be recalled that the Civil Aeronautics Act provided that the company has a legal responsibility to provide safe transportation, which certainly includes adequate maintenance. Therefore, the company would have been required, by law, to cease operations if it could not provide proper maintenance. Eastern Air Lines was able to provide for maintenance elsewhere, to the detriment of the strike's effectiveness. It appeared to the ground mechanics, that the only pilot concession was, therefore, a meaningless one. The pilots, of course, continued for the entire period of the strike to fly the airplanes.

IAM (AFL-CIO)

The mechanics, during the current dispute between the flight engineers and the pilots over the third seat in the aircraft, has remained neutral.

If a strike occurs, by either the pilots or engineers, this issue will be the basis for it. The IAM (AFL-CIO) local at Eastern, following the lead of the International, has remained neutral. But "neutrality" for them will mean supporting the flight engineers in a strike. The reasoning is that if the flight engineers go out and the pilots stay on the job, also filling the engineers' position, the mechanics would be supporting the pilots by staying on the job. Assisting them in their "strikebreaking program" would be adverse to all normal trade union practice. Therefore, the only way for them to "stay neutral" is to walk out, too.

To add what appears to be a little "poetic justice" to the situation, the IAM (AFL-CIO) is telling the pilots the same story now that the mechanics heard when they struck and asked for ALPA (AFL-CIO) support. They will not do the pilots' work, but they say they will not maintain the aircraft unless they are "adequately flown". This means the inclusion of mechanic-trained flight engineers aboard the aircraft.

On Friday, August 29, 1958, the Air Line Pilots Association (AFL-CIO) and Eastern Air Lines reached agreement on a new pilots' contract which will extend until April 1, 1960, or shortly after Eastern will have taken delivery on most of its twenty Douglas DC-8 turbojets. Following all the controversy over who is to occupy the third seat, the agreement does not make any provision to cover, or even make reference to, crew complement. According to

officials of the airline, the agreement substantially represents the Emergency Board's recommendations on all matters except crew complement. The omission of this provision appears to have been deliberately designed to forestall a strike by the flight engineers, who, however, reacted by reiterating their decision to strike unless the company sided with them.[4]

Nor has this agreement fully satisfied the Air Line Pilots Association (AFL-CIO). On October 2, 1958, Clarence N. Sayen, President of ALPA (AFL-CIO), said that unless Eastern Air Lines management goes farther than merely accepting the recommendations of the Board with respect to crew complement, Eastern Air Line pilots would refuse to fly any airplane, effective October 4, 1958. Sayen's notice to Eastern said that the strike would be a result of the company's failure to implement their verbal acceptance of the Board's report or make an agreement embodying it." Further, Sayen announced that "should the Eastern pilots be forced to withdraw from service over the crew complement issue under the deadline they have now been forced to establish, they would no longer feel morally bound by the Emergency Board's recommendations."[5] The company obtained a temporary injunction against the pilots prohibiting the strike of October 4.

On October 21, the company restated its position on the ALPA-FEIA (AFL-CIO) dispute. The statement says that any ALPA (AFL-CIO) strike would mean calling a strike because the company would not make any agreement with them

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[4]Ibid, August 29, 1958, p. 440.

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as to the precise qualifications that flight engineers, who are represented by a different union, should have on future jet aircraft. Eastern further points out that it has put into effect all the recommendations of the Board to the extent possible at this time. It has signed an agreement with ALPA (AFL-CIO) regarding wages. Since the recommendation involving piston and turboprop airplanes are the same as the company's present qualifications, this recommendation was automatically adopted. As to the turbojet issue:

> "The Board's report recommends that the flight engineer on straight jet aircraft have certain pilot qualifications and suggests certain changes to cross-seniority between pilots and engineers. The company feels that it has gone as far as it can go at this time towards further implementing the Board's recommendations and cannot proceed further until the two unions (ALPA and FEIA) get together among themselves and agree upon a method or procedure for the full implementation of the emergency board's recommendations concerning the pilot and flight engineer relationship on the straight-jet airplanes."[6]

That is where the matter stands today, as far as Eastern Air Lines is concerned. No great progress has been made short of the precedent set by the Emergency Board. Both unions are still adamant about their positions. Eastern is, perhaps, fortunate that it does not receive its first Douglas DC-8 until about January 1, 1960. By this time, all the other large carriers will have had jet operations for at least four months, and the matter may well be settled for them.

Emergency Board Number 123

The President's Emergency Board Number 123 was called to assist in a dis-

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[6]Eastern Air Lines Bulletin to All Employees, New York City, October 21, 1958.

pute involving Trans World Airlines and FEIA (AFL-CIO). The sole member of the Board was Dudley E. Whiting, of Detroit. Mr. Whiting was also a member of Emergency Boards number 120 and 121 in the Eastern Airlines dispute. TWA engineers had threatened a strike to begin June 3, 1958. The company, however, obtained a temporary restraining order from Judge Mortimer W. Byers of the Federal District Court of New York.

The decision of Mr. Whiting came as a considerable surprise to virtually all concerned, especially when his part in the Eastern Air Lines case is considered. The Board nominated the mechanic trained flight engineer for the third seat in all future TWA transports as well as those presently operating. TWA has on order thirty-three Boeing 707 turbojets and also thirty Convair 880 turbojets. These airplanes are the same, in principle of propulsion, as the Douglas DC-8 jets to be put into service by Eastern, and on which pilot engineers were recommended. Moreover, the Boeing 707 and the DC-8 will use the very same engines, a factor which serves to increase the similarity. The only exception made by the Board was that "if some future change in qualifications (by government edict) becomes effective. . .no contractual restriction should be permitted to render the fulfilling of that responsibility impossible."[7] TWA's first obligation, the report states, is to provide service to the public.

An analysis of this report leads one to the conclusion that it is not necessarily completely inconsistent with the recommendations made in the Eastern Air Lines case. In both reports it was recognized, and strongly

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[7]Report to the President by Emergency Board #123, Washington, July 25, 1958, p. 6.

emphasized, that any determination of crew qualifications, over government regulated minimums, is a management responsibility. Mr. Whiting, however, will not comment as to why two boards on which he sat as a member suggested diametrically opposed policies.

One possibility in the TWA case is that the carrier has extensive overseas routes. As mentioned in previous chapters, a flight engineer at one time was virtually a necessity on foreign routes. Since the war, however, great strides in facilities for maintaining aircraft have been made overseas, with the result that TWA operations results for international service have been comparable with its domestic service for some years. In the domestic area, if it is safer for Eastern Air Lines to have pilot engineers, why is it safer for TWA to have mechanic engineers? Their jet equipment will be at least similar; both have excellent maintenance facilities. The domestic route structure of the carriers differ, with Eastern basically operating in a triangular pattern, Miami at the apex with arms extending northward to Washington, New York and Boston, and northwestward to Chicago, Cleveland and Detroit. Trans World, on the other hand, is primarily an east-west carrier compared to Eastern's north-south operation. On the East Coast the basic terminals are Boston, New York, Philadelphia, and Washington, through Chicago, Kansas City, and St. Louis to Los Angeles and San Francisco on the West Coast. In December, TWA will also inaugurate service from St. Louis to Miami. Both carriers' route structures serve the highest density traffic points in the country. These are the cities where aircraft congestion will be most severe.

On July 31, the Flight Engineers Association International (AFL-CIO) and

Trans World Airlines concluded an agreement extending until January 1, 1960 and providing for operation of TWA jets by mechanic-engineer personnel. TWA will be flying jet equipment for most of 1959; this will allow a thorough evaluation of the necessity for mechanic-engineers on turbine jet aircraft. The scope clause also provides that FEIA (AFL-CIO) will continue to be recognized as bargaining agent for all individuals who perform the flight engineering function aboard TWA aircraft. Wage increases were estimated by the union to be between 9 and 14 per cent, with an additional 20 per cent increase for jet aircraft.[8]

Reply of Air Line Pilots Association to Board Number 123

The reaction of ALPA (AFL-CIO) to the recommendation of Board number 123 was swift. On July 31, the Association said that the report:

> "did not by any stretch of the imagination, rule on crew complement requirements for jet aircraft. Thus it cannot be compared with the Eastern Air Lines board which did rule on the qualifications of the third crew member on jets and recommended that, in the interests of safety and efficiency the third crew member should be a pilot."

In the TWA recommendation, in the view of ALPA (AFL-CIO), the board recognized the need for increased qualifications, either on the part of government or management and made provision for them. This increased qualification, according to Sayen, is to be a pilot's license.

The Air Line Pilots Association (AFL-CIO) is one of the few groups that thinks this is the case. In the opinion of industry experts, the agreement

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[8]Aviation Daily, Washington, July 31, 1958, p. 229.

merely indicates which group will bear the cost of training in the event of further requirements.

> "If additional qualifications or licenses are required by government regulation, the employees should be allowed a reasonable time to qualify but, since that is no fault of the company, the employee has an obligation to obtain such qualification or license at his own expense and on his own time. If, however, the Company imposes additional qualifications it is only fair that the employees be given a reasonable time to obtain such qualifications on Company time and at Company expense."[9]

C. R. Smith, President of American Airlines, has emphasized that the Eastern Air Lines recommendations does not fit an entirely separate dispute involving comparable personnel of his airline. Smith feels that a mechanic-engineer is absolutely vital to the operation of his airline. He feels the issue is whether a competent flight engineer, according to Civil Aeronautics Board requirements, should also have the ability to fly the airplane. American's management feels that if an engineer must be a pilot in addition to the other duties of his profession, the obvious and result would be an increase in the job opportunities for pilots, with a reduction of opportunities for engineers who are not pilots. Mr. Smith says flatly that there is a need for the services of a flight engineer, but none for a third pilot. Further, American's president says:

> "It is the opinion of the management of American Airlines that the highest standards of operating safety will accrue if the different members of the flight crew are required to have proven competency in their own professional fields. American has an agreement with FEIA which has yet nearly five years to run. I am sure that it is not the intention of the Board that the

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[9] Ibid.

> airlines will cease to respect their obligations to the unions which represent their employees. In the case of American we have a specific, written obligation to respect and continue the services of the flight engineer."[10]

On August 1, Mr. Sayen of ALPA (AFL-CIO) challenged Mr. Smith's statement. He said that, in the pilots' opinion, American's statement was:

> "nothing more than an attempt to camouflage an error in corporate judgment at the expense of solving a critical operational problem that the jets will bring. This error occurred when the company signed a five-year contract designed to place specialized, rather than fully qualified crew members in the third cockpit seat, thereby hoping to economize on training costs and avoiding a difficult safety problem. The company is now attempting to cover up this gross error in judgment and justify their intentions of going ahead and operating without fully qualified crews despite the clearly-delineated need for such a crew."

Further, ALPA (AFL-CIO) has not changed its policy of putting three qualified pilots in the cockpit of each turbine powered airplane.[11]

The latest development is an accusation by the Air Line Pilots Association (AFL-CIO) that American Airlines, Pan American World Airways, and the Flight Engineers Association (AFL-CIO) have negotiated "sweetheart" contracts for the operation of jet aircraft. The pilots contend that the two airlines have accepted an inadequate concept of flight crew training and qualifications in such contracts in an attempt to perpetuate the specialist crew concept. In return, they have received from the FEIA (AFL-CIO) agreements on favorable terms, with weak rules, and with a moratorium on further bargaining for from three to five years. Mr. Sayen has charged that FEIA (AFL-CIO) was evidently

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[10] New York Times, July 26, 1958.

[11] News Release from Air Lines Pilots Association, Chicago, August 1, 1958, p. 1.

willing to pay any price to perpetuate the specialist crew concept on those carriers' future aircraft. He said the policies of the Air Line Pilots Association (AFL-CIO) require that a crew of three fully qualified pilots be provided for the operation of turbine-powered aircraft over 80,000 pounds. The Association intends to push this policy to a conclusion. This policy of ALPA (AFL-CIO), according to Mr. Sayen, fully intends that turbine powered aircraft will not be operated by the pilots until a fully qualified crew complement is provided. In the opinion of the pilots group, the agreements between FEIA (AFL-CIO), American Airlines, and Pan American World Airways do not provide such a fully qualified crew complement.[12]

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[12]Ibid., October 15, 1958, p. 1.

CHAPTER V

OUTLOOK FOR THE FUTURE--CONCLUSIONS

Virtually all labor unions are looking forward to the swiftly approaching jet age no less apprehensively than other major aviation groups charged with the planning and preparation for commercial jet operations.

The airlines' general lack of experience with jets, and similar lack of certain knowledge of their capabilities makes prediction of manpower requirements difficult and, therefore, labor's position uneasy.

The Airline Pilots Association (AFL-CIO) which represents all airline pilots, is presently negotiating for at least sixteen new contracts. At this point all but two have required assistance of the National Mediation Board. One strike of more than a hundred days' duration has already taken place against Western Air Lines.

The Flight Engineers Association International (AFL-CIO) is the principal representative for flight engineers and is currently negotiating seven contracts, four of which require the aid of the National Mediation Board.

The author feels that in the next few years there will be a period of flight and ground crew layoffs as the jets are introduced. If the airline business picks up as most airline leaders think it will, then the layoffs will be only temporary. However, there will still be men out of work for a time.

Table V shows just how each flight crew labor union is faring in the battle to control the third seat in the cockpit.

TABLE V

Current Standings in Flight Engineer Dispute

Airline	Pilot-Qualified Flight Engineer	Mechanic-Oriented Flight Engineer	Switching from Mechanic to Pilot Engineer
American		X	
Braniff	X		
Capital	X		
Continental			X
Delta	X		
Eastern[1]			
Flying Tiger		X	
National		X	
Northeast		X	
Northwest		X	
Trans World		X	
United			X
Western		X	
Pan American		X	
Panagra	X		

[1]Eastern, of course, is a special case in which mechanic-engineers are definitely flying piston and turboprop equipment. Nothing has been decided for turbojet operation.

Table V tends to indicate that the Flights Engineers are somewhat ahead in results at this point. Only two airlines, United and Continental have deserted the ranks of mechanic-engineers and even Continental's position is not certain at this time. That carrier still has an effective contract with FEIA (AFL-CIO) stating that all engineers must have an airframe and engine license. The company has been unable to obtain pilot-engineers with the "A and E" license, and has been prevented by court injunction from hiring pilot engineers without the A and E license until a new contract is negotiated with FEIA (AFL-CIO). The old contract has expired but its provisions remain in effect until a new contract has been negotiated. The engineers union has shown no great desire to negotiate this new contract. FEIA (AFL-CIO) is apparently off to a head start having secured contracts with three of the five largest carriers, American, Pan American, and TWA, another of the five is in doubt, Eastern, and the fifth, United, seems pretty well lost.

ALPA (AFL-CIO) is an extremely powerful union, as can be seen by its strike benefits of $650 per month. It is possible that ALPA (AFL-CIO) could impose its will on any one of the three big carriers that have signed agreements with FEIA (AFL-CIO), it does not seem, however, that the pilots could succeed in beating all three. The very recent agreement between the large United States carriers to return their excess revenues to struck partner to the agreement would seem to preclude the possibility of an ALPA (AFL-CIO) total victory.[1] To have any opportunity of winning such a battle the pilots (or

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[1]Wall Street Journal, November 1, 1958. Agreement between American, Trans World, Pan American, Eastern, United, and Capital Airlines.

engineers) would have to strike all the carriers in the agreement. This would have the effect of almost completely curtailing air transportation in the United States and would also make it impossible for ALPA (AFL-CIO) to pay its standard strike benefits as almost 80 per cent of its pilots would not be able to contribute anything to the union. This also applies to FEIA (AFL-CIO), but it is not likely to seek a shut-down of the whole industry because their program seems to be ahead.

One situation that has a strong bearing on the case has been virtually ignored within the industry. All indications point to the fact that a large group of senior Captains do not agree with the policies of their Association and strongly prefer the inclusion of mechanic flight engineers aboard their aircraft for reasons of safety. Many letters in industry magazines from senior pilots state this and it is the certain knowledge of the author that in many instances, pilots on one major airline definitely prefer mechanic engineers to a third pilot. These pilots without exception prefer to remain anonymous in order to avoid possible reprisals from their union. A majority of the pilots of at least two major airlines are known to be dissatisfied with current ALPA (AFL-CIO) strategy.

Opinion of the Author

The sympathies of the author are with the flight engineers. He feels that airline managements should no more make a change in the engineers' agreement, without their consent, than they should a change in the pilots' agreement without their consent.

Both groups make good cases for the safety factor. The allegations of ALPA (AFL-CIO) seem a little hollow, however, in view of their willingness to accept non-pilot qualified flight engineers on turbine aircraft provided they are members of the ALPA (AFL-CIO) and not FEIA (AFL-CIO).

The pilots talk a good deal about the "fail safe" concept, but only regarding turbine powered aircraft. Nor have they suggested that a third pilot is necessary in the Viscount turboprop, but have demanded it in the Electra turboprop. Moreover, even the extra man does not provide complete safety. The argument for a second engineer in many railroad trains is that if the first engineer becomes disabled, the second one could take over. The recent fatal accident of a Jersey Central train at Newark involved the disability due to heart condition of the first engineer, but the second (a fireman, which the company considers as second engineer) failed to assume command.

ALPA (AFL-CIO) also has a good argument regarding progression in the cockpit. The flight engineer could become sufficiently proficient to become a co-pilot and thence a pilot. This ignores the fact that a definite progression exists with the flight engineers job as the goal. The mechanics in the ground crew virtually to a man are aiming at the day when they will be able to attain the necessary skills to fulfill airline regulations and become qualified flight engineers. Many of these people are not interested in piloting techniques and have no desire to become pilots.

Moreover, the demands by pilots for pay increases appear to be excessive. They are apparently relating their pay demands to the productivity of a single piece of equipment which does not take into account the overall company

experience with the new equipment. They are ignoring increased maintenance costs, capital outlay and all other related factors. By relating pay to the specific productivity of one piece of equipment, such as the jet airplane, the pay of a select few may, without any effort on their part, suddenly skyrocket to extreme and disproportionate heights.

At this time the future looks very unclear for any concrete decisions. The government could solve the problem by requiring either a pilot's license or an A.and E license for all jet operations. A change in requirements is considered extremely unlikely as no real reason exists for changing present requirements. It seems then that the problem must be eventually faced squarely by each individual airline. United Air Lines appears to be in about the best situation since it has an agreement with its engineers, represented by FEIA (AFL-CIO), that they be pilot qualified. Some trouble may still exist for this carrier since the demand of ALPA (AFL-CIO) that this individual be employed as a pilot, and thus be a member of ALPA (AFL-CIO) has not been met.

For the future, then, the author looks for one major strike on the part of ALPA (AFL-CIO), either against Pan American World Airways in early 1959, or against American Airlines in late winter or the early spring of 1959. The first jets operated by these airlines will be flown by supervisory personnel, but this cannot last for long, nor is it likely that ALPA (AFL-CIO) will permit this for more than a short time. Further, some compromise on the part of ALPA (AFL-CIO) is almost a foregone conclusion. They have lost or are losing three major battles, and their demand for a third pilot in a four-man crew is expensive enough to completely wipe out the operating profit of many a large

carrier and will not be tolerated.

But today the controversy smolders. It is reaching such intensity that it may ground the nation's airlines. The saddest part is that there is enough increased productivity in the jet airliners, which, when combined with the sharply increasing traveling population, means that nobody really needs to suffer. There will be dollars and jobs enough for all today's employees if FEIA, ALPA (both AFL-CIO), the government, and the carriers will be willing to negotiate on the basis of mutual trust and justice.

EPILOGUE

Recent developments in the industry have clarified the third man situation as far as Eastern Air Lines and American Airlines are concerned. It will be recalled that Eastern negotiated an agreement with ALPA (AFL-CIO) guaranteeing a third pilot in the cockpit of all future Eastern jetliners. The flight engineer was to become pilot-qualified. This agreement precipitated a strike by FEIA (AFL-CIO) against Eastern. The settlement of the strike (in which the ground mechanics supported the flight engineers) continued the mechanic-engineer in his position. The result is a four-man flight crew, consisting of pilot, co-pilot, third pilot and flight engineer. The third pilot may be a trainee, and the airline guarantees this crew member a minimum of $650 per month.

In the case of American, pilots struck to obtain a third pilot and won. The composition of the flight crew will be the same as Eastern Air Lines. The author understands that Pan American is likewise committed to a four-man crew during current negotiations.

An interesting situation is developing at United Air Lines. The Flight Engineer on this line is already pilot-qualified. The paramount question here is: Will ALPA (AFL-CIO) demand four pilots in the cockpits of United's DC-8 jets? The inclusion of a pilot-engineer in United's cockpits has already fulfilled ALPA (AFL-CIO) requirements. If United does operate with a three-man crew, its crew costs will be 15-25% under those of its competitors.

On December 20, 1958 United and FEIA signed a contract under which engineers will be pilot-qualified, but providing that non-pilot engineers may continue on piston planes into the 1960's and then quit with severance pay of from $10,000 to $20,000.

Engineers received a wage increase retroactive to October 1, 1957. Exact wage provisions are unknown, except that FEIA (AFL-CIO) states they are somewhat higher than the FEIA (AFL-CIO) - American Airlines settlement reached eight months ago. Agreement runs until June 1, 1963.

United has for some time hired only pilot-engineers. Under the new contract, engineers on the payroll who are not so qualified have until January 1, 1961 to pass the pilot examination in order to be able to take jet transition training. If the engineer does not take pilot training or if he fails twice to pass the examination, he can continue to work on piston planes until January 1, 1963. He may then elect to (1) quit and take $20,000 in severance pay, or (2) continue on piston planes as long as UAL flies them, with severance pay decreasing $2,000 a year to a $10,000 minimum.

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APPROVAL SHEET

The thesis submitted by Thomas Francis Miller has been read and approved by three members of the faculty of the Institute of Social and Industrial Relations.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Social and Industrial Relations.

February 4, 1959
Date

Philomena Mullady
Signature of Advisor